DOCUMENTS EXPEDITING PROJECT

[COMMITTEE PRINT]

FOURTEENTH REPORT TO CONGRESS

(January 1, 1959, through June 30, 1959)

OF THE

DEPARTMENT OF DEFENSE

In accordance with section 8

OF THE

DEFENSE CATALOGING AND STANDARDIZATION ACT OF 1952

Public Law 436, 82d Congress

SUBCOMMITTEE FOR SPECIAL INVESTIGATIONS

OF THE

COMMITTEE ON ARMED SERVICES

UNITED STATES HOUSE OF REPRESENTATIVES

(86th Congress, 1st Session)

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LETTER OF TRANSMITTAL

ASSISTANT SECRETARY OF DEFENSE,
SUPPLY AND LOGISTICS,
Washington, D.C., July 31, 1959.

Hon. CARL VINSON,
Chairman, Committee on Armed Services,
House of Representatives.

DEAR MR. CHAIRMAN: As prescribed by section 2455, title 10, United States Code (formerly sec. 8 of Public Law 436, 82d Cong.), there is transmitted herewith the Fourteenth Semiannual Report on the Department of Defense Cataloging and Standardization Programs. This report covers the period from January 1, 1959, through June 30, 1959.

In accordance with that section, reports on these two programs have been compiled into a single report.

Sincerely yours,

PHILIP LEBOUTILLER, Jr.,
Deputy Assistant Secretary of Defense
(Supply and Logistics).

LETTER OF TRANSMITTAL.

FOURTEENTH REPORT TO CONGRESS ON THE DEPARTMENT OF DEFENSE CATALOGING AND STANDARDIZATION PROGRAMS

General

During fiscal year 1959, the Armed Forces Supply Support Center (AFSSC) continued its efforts to improve the organization, administration, and operations of the Federal Catalog System and the Standardization Program. To achieve maximum compatibility between these and other supply management functions, a centralized planning staff comprised of cataloging, standardization, and materiel utilization specialists, as well as professional management analysts, has been established in the AFSSC.

The efforts of this staff are being directed toward the integration of cataloging and standardization procedures and the development of plans for full utilization of the catalog system data and facilities and the products of the standardization program.

In this connection, chapter 145, title 10, United States Code, provides that additional management data may be included in the Federal Catalog as determined necessary or desirable. In addition to data required in the cataloging process, 27 other categories of information applicable to supply management and standardization are now being included in the central automatic data processing system files and disseminated through the Federal Catalog System to inventory control points and other users as required. The Federal Catalog System has proved its capability to meet the changing needs of management which are being brought about by increased complexity in weapons systems and improved management techniques.

The redirection of standardization efforts toward areas of greater item reduction potential continues in the form of a reevaluation of all standardization projects and the integration of inventory management, cataloging, and standardization procedures where necessary to achieve maximum item reduction.

In addition to item reduction, standardization efforts have resulted in significant advances in the areas of standard drawing practices, design standards, and other standards guidance applicable in the design and development of new weapons systems and equipment. Although not immediately measurable in dollar savings, these achievements are considered even more significant than the immediate reduction of items in the military supply systems since they have a more direct effect on military readiness and logistics capabilities in the future.

DEFENSE CATALOGING PROGRAM

Under the Federal Catalog System, primary emphasis continues to be directed toward the improvement of cataloging services, the quality of catalog data, and the further utilization of the data and facilities

of the Federal Catalog System in logistics operations. Principal among the developments for improving cataloging services is a system for transmitting catalog and other management data by wire. The wire transmission system was officially activated on March 16, 1959, between four field activities and the central cataloging organization in the Armed Forces Supply Support Center, Washington, D.C. By June 15, 1959, the central office was linked by wire to a total of 24 field cataloging activities. There are 12 cataloging activities remaining which are scheduled to be using the wire transmission system by September 30, 1959.

This system, which is unique in design and application, was developed through the joint efforts of the Department of Defense, equipment manufacturers, and commercial communications organizations. The significant features of the system are:

1. It provides greater uniformity in the submission of catalog data and increases operational efficiency by eliminating many steps in the preparation, submission, and distribution of Federal Catalog data. As the system is installed, the time required for an inventory control point to obtain Federal stock numbers and related data is being reduced from as much as 20 workdays, formerly required, to 12 workdays.

2. It provides the capability for an intercommunications system connecting inventory control points with each other and with the AFSSC, thus greatly facilitating the exchange throughout the Department of Defense of all data contained in the Federal Catalog System.

Maintenance of the Federal Catalog System to provide stock numbers and related catalog data to the military services continues to represent a sizeable operation. The following information provides an indication of the volume of business and the magnitude of the cataloging operation. During the first 6 months of 1959, 260,583 items were added to the Federal Catalog System. During the same period, 187,238 items were deleted. This represents a net increase of 73,345 items during this period, and leaves a total of 3,498,536 active items of supply identified in the Federal Catalog System on June 30, 1959.

The addition of items is brought about primarily by new weapons systems with thousands of new parts and by technological improvements in old items. By concentrating on the elimination of items no longer required in support of the military forces, we have been able to achieve a relative degree of stability in the level of items in the Federal Catalog System. As the Accelerated Item Reduction (AIR) Program progresses and tighter controls are exercised over the input of new items, it is expected that greater stability in the number of active items in the Federal Catalog System will be attained and at a lower item level.

A comparison of the supply systems of the military services, in terms of the total quantities of active items in these systems, is afforded by the following table. Until implementation of the Federal Catalog System was completed, statistics reflecting total items of supply in the Department of Defense were not available.

Military service	June 30, 1958	Dec. 31, 1958	June 30, 1959
Army	980,928	929,546	878,954
Navy	1,240,225	1,205,659	1,204,571
Air Force	1,579,965	1,592,491	1,706,157
Marine Corps	221,163	248,032	276,580
Total	4,022,281	3,975,728	4,066,262

The AFSSC, under a funding arrangement with the General Services Administration, continues to serve as the central processing office for cataloging requirements of the civil agencies as well as for the Department of Defense. As of June 30, 1959, a total of 75,885 active item identifications were recorded in the AFSSC's files as being used solely by civil agencies. An additional 27,836 item identifications were recorded as being used jointly by the Department of Defense and by civil agencies.

The AIR Program, which was initiated to achieve a rapid reduction in the number of items in the military supply systems and increase the multiservice use of items, is producing very worthwhile results. The first step which is the application of codes to each item to denote its status (i.e., standard, nonstandard, local purchase, centrally managed, under single manager cognizance, etc.) is proceeding on schedule. As of June 30, codes had been applied by the inventory managers of the military services to 1,671,011 items and EAM cards reflecting these codes submitted to the AFSSC. Analyses by the inventory control points attended to code application, together with the subsequent reconciliation of records between inventory control points and the AFSSC, have resulted in reductions in the number of active Federal stock numbers in the FSC classes completed of 4.9 percent.

Also, as apart of the AIR Program, 24 FSC classes of administrative and housekeeping items were selected for short-cut standardization on the basis that, for the most part, standardization decisions could be reached in these classes by supply personnel with a minimum of engineering assistance. Review of these classes was completed on April 30, 1959. Five FSC classes, covering 944 items of office machines, recreational equipment, etc., were determined to offer no economical standardization potential. Of the 14,535 items in the remaining 19 FSC classes, 9,946 or 68.4 percent were designated as nonstandard. These decisions have been published and distributed to inventory control points for recording on stock record cards and the initiation of supply actions to eliminate nonstandard items from the supply systems.

Another phase of the AIR Program is designed to improve the quality of Federal Catalog data. Procedures and a schedule for this phase have been issued and implementation has commenced.

In 1957, it was determined that industrial production equipment could be effectively managed under a uniform system of production equipment codes and that production equipment codes could be developed at less cost than item identifications under the Federal Catalog System. The development of production equipment codes has been completed in the three areas of metalworking machinery, welding equipment, and materials-handling equipment. The com-

pilation of directories in these three areas will be completed on schedule by October 31, 1959.

The third meeting of the NATO Panel on Codification of Equipment, which was held in Paris, France, during May 1959, reflected substantial progress among NATO member nations in the development and changeover to the use of a uniform method of item identification. The United States continues to provide positive leadership and assistance in connection with the many complex problems arising from international cataloging and the exchange of item identification data among participating nations. The use of a uniform system of item identification increases the cross-servicing potential among NATO nations, thereby improving their individual and combined defense capabilities. For example, uniform NATO stock numbers have been assigned to fuels on which standardization agreements have been reached by user nations, thus permitting quick recognition of exchangeable assets among NATO nations. Also, the NATO Maintenance Supply Services Agency (NMSSA), whose primary mission is to facilitate the supply of maintenance material among NATO nations, requires the use of a uniform system of item identification for effective redistribution of assets.

DEFENSE STANDARDIZATION PROGRAM

The Department of Defense has continued during this period to pursue an aggressive, yet practical, Defense Standardization effort. We have attempted to maintain established schedules and, at the same time, introduce into the Standardization Program greater flexibility to permit periodic program adjustments as dictated by new weapons systems development. Basic program improvements have been made to (1) provide greater concentration of item simplification in order to provide quicker results in supply system operations, (2) promote greater use of industrial and trade standards and improve coordination programs with industry, (3) improve procedures for controlling and managing resources available for standardization, and (4) improve programs for obtaining maximum usage of specifications and standards in supply system procurement.

Further improvements have been made in adjusting item simplification work to concentrate all practical effort in the AIR Program. Under the Standardization Program, simplification was completed in 38 of the 94 scheduled classes and is on schedule in 40 additional classes. The following are typical examples of the reductions being achieved through this simplification effort:

Item	Before	After	Percentage of reduction
Medical suture needles	51 types	27 types	48
Cable cord and wire	3,800 items	2,336 items	38
Fuel filters	43 types	4 types	91

This action, additionally, will bring about a reduction of approximately 400 items in terms of components and repair parts, such as gaskets and service kits.

During this period, the publication of new and revised military standards has designated 94,827 sizes, kinds, and types of generally

similar items which will no longer be authorized for future procurement. This adds up to a total of 937,387 items which have been earmarked against future procurement since the beginning of the Standardization Program under Public Law 436.

During this period, 50 military and Federal specifications have superseded and replaced a total of 110 existing overlapping or duplicating military service specifications. This provides a total of 1,752 duplicating specifications which have been replaced by 681 specifications since Public Law 436 was enacted.

With respect to the development of detailed programs and schedules for standardization, 312 Federal supply classes were scheduled for completion by July 1, 1959. All but four were established. Accordingly, of the total of 431 classes requiring standardization schedules, 71 percent of the required schedules are now complete. Scheduling is proceeding at a pace which permits the most effective use of available resources.

One of the major problems in the Department of Defense is to establish an adequate interchange program for technical data used in new weapons systems design and procurement. Without this interchange system, extensive duplication of major equipments and associated research time occurs. In this connection, a special project under the standardization effort has been developed and assigned to the Air Force as monitor for the purpose of reducing major equipments associated across the various ground support equipment systems, supporting major weapons in the military services. This project provides for the development and interchange of complete technical descriptions of existing and new support equipment for air weapons systems to all elements of ground support. Military Specification MIL–D–19731A has been issued which establishes those common data sheets for aircraft and missile systems support equipment. This project is applicable to both military and commercial contractors. These uniform data sheets will provide for the "pooling" of the technical data and knowledge for items in both the development and production stage among military activities and industrial designers.

During this period, we have achieved the first step of a long-sought goal to provide standard engineering drawings and related technical documents for all military services. Two years of intensive effort by military and industrial activities working in close coordination have resulted in the development and issuance of Military Specification MIL–D–70327 on April 9, 1959. This specification will achieve maximum uniformity in the preparation, administration, and use of engineering drawings. It will also provide for rapid interchange of costly engineering data between the military departments and their contractors. This will reduce costs and improve efficiency in drafting rooms of industry by reducing the variety of requirements heretofore imposed by military activities having different requirements. This specification replaces 158 specifications formerly used by the military departments to obtain drawings.

Specifically, the specification—

1. Is mandatory for use by the military in obtaining drawings of items in production as well as in research and development resulting in designs for production;

2. Invokes all the existing drafting practice standards as well as two new ones which define the types of drawings that may be obtained and the nature of associated lists;

3. Establishes the order of precedence for the selection of documents governing designs;

4. Establishes minimum requirements for the design identification of materials, parts, and processes;

5. Standardizes the materials of which drawings are made;

6. Establishes a method of numbering drawings which identifies the sources of drawings;

7. Provides a checkoff list for the use of military procurement officers in ascertaining that all requirements for drawings are included in the contract or order; and

8. Establishes a common language (symbols, terminology, and related diagrammatics) for communication of engineering data.

Military Specification MIL–D–70327 provides for the first time for the acquisition of drawings by the military departments which are acceptable to, and understandable and usable by, all elements of the Department of Defense. Through this standardized medium of communication, we now have a basis for working out a system to disseminate, rapidly and accurately, costly engineering data to all those interested elements of the military departments and their contractors. In the past, because of the lack of a common engineering language, the solution of a technical problem more often than not would remain unknown to other activities seeking a solution to the same or a closely related problem. Consequently, vast sums of money were expended needlessly in solving each problem several times and frequently in a variety of ways. In order to take full advantage of MIL–D–70327, the administration and management of the drawings by the several elements within the Department of Defense must be compatible in order that knowledge contained therein may be rapidly disseminated.

Additional projects covering microfilming equipment and practices for reproducing drawings, a uniform procedure for the approval to use nonstandard parts in design, and a project to integrate data processing machine requirements of both the military and industry for the preparation of lists associated with drawings are indicative of some of the problem areas currently being attacked under the Standardization Program.

Because of the tremendous potential benefits to be derived from these new documentation projects, they are among those having our highest priority.

Other examples of significant standardization accomplishments realized during this period are as follows:

1. Power transmission chain

There are more than 20,000 varieties of power transmission chains used in the Department of Defense. Over 6,000 of these varieties are stocked as replacements in military supply systems. The recent trend in equipment design has been for even more special types of chains. The Department of Defense and industry have been vitally concerned over the establishment of standards in this area. To date, our efforts have resulted in six standards providing for 921 different standard chains. Two additional standards are under preparation. When all 8 standards are completed, they will cover 1,100 standard

types and sizes which will ultimately replace the 6,000 chains now stocked as spares.

2. Environmental requirements for electronic component parts

Military Standard MIL–STD–446, covering the environmental requirements for electronic component parts was approved on April 28, 1959. This standard establishes eight discrete levels of environmental conditions applicable to the design of equipments and their component parts. Heretofore, parts have been designed to withstand random conditions of environments depending on the peculiar or special needs of each weapons system. This standard will also guide the developers of new electronic component parts and should ultimately result in a substantial reduction of the variety of electronic items that will enter the military supply systems.

3. MIL–STD–12B, abbreviations for use in drawings and technical-type publications

A revision of this standard was approved May 18, 1959. It contains over 5,000 abbreviations which are to be used when abbreviations on drawings or in technical manuals are appropriate. A survey made by an industrial association indicated that this standard has also been used extensively by industry as a guide for abbreviations.

4. Locomotive and rail cars

By standardization study and action, items in FSC Class 2210—Locomotives and FSC Class 2220—Rail Cars will be limited to a reduced number of types. Specifically, two military standards limiting future procurement of road and switching locomotives and industrial and special locomotives will result in a net reduction of 67 items out of 78 considered. This represents a net reduction of 87 percent. Standardization of rail cars will permit a reduction of 54 items of the total of 76 considered. This represents a net reduction of 72 percent.